
**National Park Service
U.S. Department of the Interior
Vicksburg National Military Park**



Environmental Assessment

Improve Access to the Georgia State Memorial

June 2011



**U.S. Department of the Interior
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Improve Access to the Georgia State Memorial**

**Vicksburg National Military Park
Warren County, Mississippi**

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Summary

The National Park Service proposes to improve visitor access to the Georgia State Memorial at Vicksburg National Military Park (VNMP), Mississippi. The Georgia State Memorial is included in the National Register of Historic Places which encompasses all of Vicksburg National Military Park, and is on the park's List of Classified Structures (#3364).

Dedicated in October 1962, the memorial is located on the South Loop of the VNMP tour road, approximately 300 ft from Tour Stop 14 (Ft. Garrott) and is isolated from the tour route. Originally situated on the park tour road, the memorial stands on the roadbed which connected the current park tour road with Confederate Avenue now located outside the park's southern boundary. In the mid-1960s, Congress directed that the lower third of VNMP be turned over to the City of Vicksburg, and the property was quitclaimed to the city. Consequently, the park's tour road was turned into a 'closed loop' route within the park by removal of the pavement between the park tour road and city-owned road. While traveling the park tour road, attention is predominantly focused on the Ft. Garrott earthwork at Tour Stop 14, and the visual presence of the Georgia State Memorial is often missed. Additionally, access to the memorial is currently along the grassed former roadbed raising issues concerning accessibility and visitor safety.

These concerns have been addressed in this environmental assessment (EA), and 3 alternatives are considered.

Alternative A, the No Action Alternative: The memorial will remain in its current location and routine maintenance (mowing) would continue. Precautions would be taken to help ensure safety of visitors in the vicinity. The structure will continue to be impacted by its visual isolation, resulting in the continued loss of a significant and a vital interpretive opportunity (Fig. 1).

Alternative B (Preferred Alternative): The memorial would be moved approximately 300 ft closer to the park tour road. The memorial will still be situated in an area of historical integrity as it will rest along the line occupied by Brig. Gen. Alfred Cumming's Georgia Brigade during the Siege of Vicksburg. This alternative would provide better visual access from the vehicles traveling the tour route, and also a safer means of visitor access. It would place the memorial closer to the Tour Stop 14 parking area, allowing visitors to better approach the memorial from the roadside. Additionally, interpretive media would be placed to draw greater attention to the

memorial's location and accessibility. This alternative would better ensure the health, comfort, safety, and security of visitors, as well as complying with applicable accessibility regulations (Fig. 2).

Alternative C: The memorial would remain in its current position and an approximately 300-ft, maintained footpath would be created, leading from the tour road to and around the memorial. The footpath would be graded, sloped, and covered with appropriate material to comply with accessibility regulations, and offer visitors a safer access route to the memorial. Additionally, interpretive media would be placed to draw greater attention to the memorial's location and accessibility (Fig. 3).

Alternative B is the preferred alternative of the National Park Service.

This environmental assessment evaluated the effects of these alternatives on natural and cultural resources, as well as on visitor experience and the human environment. Among other benefits, the improved access to the Georgia State Memorial would better the condition of an important park resource and greatly enhance the visitor experience. The alternatives analyzed in this environmental assessment would not result in major environmental impacts or impairment to park resources or values.

Note to Reviewers and Respondents

Reviewers should provide their comments on the EA during the review period. This will allow the National Park Service to analyze and respond to comments at one time, thus avoiding undue delay in the decision-making process. Reviewers are encouraged to structure their participation in the National Environmental Policy Act process so that it is meaningful and alerts the agency to the reviewer's position and contentions. Comments on the EA should be specific and should address the adequacy of the analysis and the merits of the alternatives discussed. 40 CFR 1503.3.

Comments on this EA must be delivered or postmarked no later than **July 20, 2011**. If you wish to comment on this EA, electronic comments are preferred. The National Park Service's Planning, Environment, and Public Comment (PEPC) web site and an email address are both available for this purpose:

PEPC: <http://parkplanning.nps.gov/vick>
E-mail: VICK_Superintendent@nps.gov.

Mailing Address: Superintendent, Vicksburg National Military Park, 3201 Clay Street,
Vicksburg, MS 39183

Important Notice: Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.



Fig. 1. Current location of Georgia Monument in Vicksburg National Military Park (Alternative A - No Action).



Fig. 2. Proposed relocation site of Georgia Monument in Vicksburg National Military Park (Alternative B - Relocation of Georgia State Memorial).



Fig. 3. Proposed footpath access to Georgia Monument in Vicksburg National Military Park (Alternative C - Construct an Accessible Footpath).

1.0 PURPOSE AND NEED FOR ACTION

1.1 Introduction

The National Park Service (NPS) is considering a proposal to improve access to the Georgia State Memorial at Vicksburg National Military Park, Warren County, Mississippi. This action is needed to preserve this important National Register property, improve visitor interpretative and accessibility opportunities, protect public and employee health, safety and welfare, and improve park operational efficiency.

The Georgia State Memorial is one of twenty-eight state memorials erected at Vicksburg National Military Park. It is listed on both the National Register of Historic Places and the park's List of Classified Structures. Given its present location, the memorial has become spatially isolated along the park's tour route.

1.2 Purpose and Need for the Project

National Park Service *Management Policies 2006* and *Director's Order 28* stress the need for protection and preservation of significant historic properties such as the park's state memorials and monuments. The park's General Management Plan (GMP), Interpretive Prospectus (IP), Long-Range Interpretive Plan (LRIP), and Cultural Resource Management Plan (CRMP) all call for relocation of the Georgia State Memorial. Optimum visitor experience at Vicksburg is not being offered because the Georgia State Memorial is currently spatially isolated to visitors, and access is limited to only those park visitors who can walk the grassed roadbed to the memorial. As a crucial and integral part of the park story, the Georgia State Memorial needs to be more visually apparent and accessible to visitors. However, given its present location, visitors often miss the memorial while traveling the tour route, nor can they fully appreciate its historic significance.

The shortcomings described above must be addressed for the project to be considered a success. Specific project purposes are:

- Maintain integrity of this National Register property and retain compatibility with other historic park structures;
- Protect public and employee health, safety, and welfare by meeting Occupational Safety and Health Administration standards for safe and effective accessibility, and by reducing the need for hazardous maintenance activities; and
- Provide enhanced visitor interpretation and educational opportunities, including improved access to the Georgia State Memorial for a broader understanding of its place in story of the Campaign and Siege of Vicksburg.

An environmental assessment (EA) analyzes the proposed action and alternatives and their impacts on the environment. This EA analyzes the no action alternative and two action alternatives for improved access to the Georgia State Memorial to determine their

impacts on the environment. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969; Council on Environmental Quality regulations for implementing the National Environmental Policy Act (40 *Code of Federal Regulations* Parts 1500-1508); National Park Service's *Director's Order (DO) #12 and Handbook: Conservation Planning, Environmental Impact Analysis, and Decision Making* (NPS 2001); and the National Historic Preservation Act of 1966 and its implementing regulations at 36 *Code of Federal Regulations* 800.

The proposed improved access and treatment to the structure would be designed to ensure compliance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995b). Under these standards, there are four distinct, but interrelated, approaches to the treatment of historic properties – Preservation, Rehabilitation, Restoration, and Reconstruction. The treatment *Preservation* focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time. *Rehabilitation* acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character. *Restoration* is undertaken to depict a property at a particular period of time in its history, while removing evidence of other periods. *Reconstruction* re-creates vanished or non-surviving portions of a property for interpretive purposes. The treatments chosen for the Georgia State Memorial are based on a variety of factors, including the historical significance of the structure, its physical condition, proposed use, and enhanced interpretive potential.

1.3 Park Purpose and Significance

Vicksburg National Military Park in Vicksburg, Mississippi was established on February 21, 1899. The park is the site of a 47-day Civil War siege of Confederate troops by Union forces under the command of General Ulysses S. Grant. The Vicksburg campaign was waged from March 29 to July 4, 1863 and included battles in west-central Mississippi at Port Gibson, Raymond, Jackson, Champion Hill, and Big Black River, as well as operations against Confederate forces defending the city of Vicksburg. Vicksburg, which was heavily fortified and located on a high bluff overlooking a bend in the Mississippi River, was aptly dubbed the “Gibraltar of the Confederacy.” Its surrender on July 4, 1863, coupled with the July 3rd defeat of Confederate General Robert E. Lee at the battle of Gettysburg, marked the turning point of the Civil War, and foreshadowed the eventual downfall of the Confederacy. When Vicksburg fell, the Union gained control of the Mississippi River and effectively isolated the states of Arkansas, Texas, and most of Louisiana – a region upon which the South depended heavily for recruits and supplies. Vicksburg National Military Park serves as a lasting memorial to both the soldiers and civilians who suffered through the turmoil and tragedy of the American Civil War.

The Georgia State Memorial stands 300 ft southwest of Tour Stop 14 (Ft. Garrott) on the VNMP tour road. Dedicated on October 25, 1962, the structure specifically memorializes those Georgia soldiers who died at Vicksburg, and is identical to the Georgia memorials placed at Gettysburg and Antietam.

As stated in the park's general management plan (1980), the purpose of Vicksburg National Military Park is the "preservation and protection of existing earthworks, fortifications, structures, monuments, memorials, and other outstanding natural and historical features within its jurisdiction in such as way to provide the visitor with a pleasing and rewarding experience. It is also to further the visitor's understanding and appreciation of the ordeal experienced by all persons of both North and South at Vicksburg during the months of May, June, and July 1863."

Vicksburg National Military Park is significant because:

- The park encompasses 1,800 acres and is one of the more densely monumented battlefields in the world, as over 1,350 monuments, markers, tablets, and plaques dot the historic landscape;
- The park preserves and maintains the largest collection of outdoor sculpture in the southeastern United States;
- The park preserves nine historic fortifications, over 20 miles of reconstructed trenches, approaches and parallels, 15 bridges (9 of which are historic structures), five historic buildings (two ante-bellum homes—the Shirley House and General Pemberton's Headquarters), 149 historic cannon and carriages, a visitor center, the U.S.S. Cairo gunboat and museum, and 17 miles of hard-surfaced roads; and
- The park preserves Vicksburg National Cemetery with over 18,300 interments, the largest number of Civil War soldiers of any national cemetery in the United States.

1.4 Project Background, Other Projects and Plans, Objectives, Scoping, and Value Analysis

1.4.1 Project Background

The Georgia State Memorial stands 300 ft southwest of Tour Stop 14 (Ft. Garrott) on the VNMP tour road. It was designed by Harry Sellers, and erected by Marietta Memorials, Inc., of Atlanta, Georgia. It is made of polished granite, with an 8 ft x 8 ft x 4 ft stepped base and pedestal supporting a 3 ft x 3 ft x 12 ft straight shaft. The shaft is inscribed and incorporates the Georgia state seal, and the word GEORGIA appears in raised letters at the fluted top of the shaft.

The proposal to relocate the Georgia State Memorial closer to the VNMP tour road was first presented in November 1990. Consultation with the Mississippi State Historic Preservation Officer (SHPO) at that time indicated concurrence with the proposed relocation and determination of no adverse effect to the resource. This was subsequently approved at the Southeast Regional Office level and Sec. 106 compliance considered complete at that time. However, no action was taken to physically relocate the memorial

at that time. NPS will re-initiate consultation with the SHPO as required by Section 106 of the National Historic Preservation Act.

The current project aims to complete the compliance process through this EA and implement the preferred alternative of relocating the Georgia State Memorial to a position closer to the VNMP tour road to provide better visual presence and visitor accessibility. Relocation would allow a more accessible and safe environment, and further enhance the park's interpretive mandate. Visitors would gain a better understanding of the role the Georgia troops played during the siege and defense of Vicksburg, and enable the park to better meet its GPRA goals.

1.4.2 Other Projects and Plans

The Georgia State Memorial project would be consistent with the Vicksburg National Military Park general management plan (NPS 1980). This document is the primary planning guide for Vicksburg National Military Park. All other planning documents must conform with and tier from the general management plan. Relocation of the Georgia State Memorial under the proposed action supports the purpose of the park as defined in the general management plan, "...to maintain and, where necessary, restore the historical integrity of the sites, structures, and objects significant to the commemoration and interpretation of the Civil War history of Vicksburg"(NPS 1980).

Several projects and plans that the National Park Service has in place, in progress, or planned for the near future may affect decisions regarding this project to improve access to the Georgia State Memorial. As part of the analysis and consideration of potential direct, indirect, and cumulative impacts, the following potential projects that may occur in or near the project area have been identified:

Additional Road Work – Road improvements have been completed for several routes within the park, including the South Loop Tour Road, Confederate Avenue, Connecting Avenue, and the National Cemetery Road. Work on these roadways involved reconstructing to some degree any missing or deteriorated pieces of roadway, improving parking areas and bridge surfaces, repairing or replacing curbs, and installing drains. In addition, future work on the Park Tour Road would result in the replacement of two historic bridges. The bridges do not conform to American Association of State Highway and Transportation Officials (AASHTO) specifications and are of insufficient strength to support the weight of heavy tour buses and the amount of visitation that exists in the park today.

Fire Management Plan – The park has prepared and annually updates a fire management plan and environmental assessment. Prescribed fire is a valuable tool which is used to maintain the historic landscape of the park. Regular use of fire helps control the spread of exotic plants, which present notable management challenges at the park.

Vegetation Management Plan – The park has developed a vegetation management plan, which establishes measures to be taken to protect native vegetation and control invasive species such as kudzu and privet that threaten the historic landscape.

Vista Clearing – A ten-acre vista clearing project has been completed along the south loop at the Railroad Redoubt so that visitors can view the battle lines as they appeared during the Civil War. Approval has been obtained to undertake additional, similar clearing projects in the park as funding becomes available.

1.4.3 Objectives

The preservation of vital cultural and natural resources, as well as the protection of public health and safety, are mandated by National Park Service policy. The primary objectives for relocation of the Georgia State Memorial was determined by park and regional staff, and were integral in the development of the plan to make the memorial more accessible. The objectives of this action are to:

- Preserve and maintain the integrity of this National Register property and retain compatibility with other historic park structures,
- Improve and enhance visitor interpretation and educational opportunities, including greater accessibility to the Georgia State Memorial for a broader understanding of its place in American history,
- Protect public and employee health, safety and welfare by meeting Occupational Safety and Health Administration standards for safe and effective entry and exit, and by reducing the need for hazardous maintenance activities, and
- Improve the park's operational efficiency and sustainability and meet goals established pursuant to the Government Performance and Results Act.

1.4.4 Scoping

National Park Service internal discussions led to identification of the main issues and impact topics to be addressed in this environmental assessment. Through a memorandum dated June 23, 2011, NPS initiated formal consultation with the U.S. Fish and Wildlife Service agency regarding endangered and threatened species compliance for this project pursuant to the requirements of the 1973 Endangered Species Act, as amended, and 2001 NPS Management Policies (Appendix A).

Over the past few years, the Mississippi State Historic Preservation Officer (SHPO) has been involved in many of the projects occurring at Vicksburg, including relocation of the Georgia State Memorial. A letter from the SHPO dated March 13, 1991, provided concurrence on a plan for the Georgia State Memorial relocation submitted by the park. The park has initiated a follow-up Section 106 consultation through a memorandum to the SHPO describing the project and inviting continuing agency participation. This letter was sent to the SHPO on June 23, 2011 (Appendix A).

This environmental assessment will be sent to relevant agencies for their review and comment, and agency comments on the project will be addressed in the final compliance documents. As part of the ongoing compliance, the park also will draft a separate assessment of effect form to seek formal SHPO review and concurrence with the

National Park Service determination of project effect. Copies of letters to the above regulatory agencies are contained in Appendix A.

A summary of the consultation and coordination efforts for this project may be found in the “Consultation and Coordination” section of this environmental assessment.

1.5 ISSUES, CONCERNS, AND DERIVATION OF IMPACT TOPICS

1.5.1 Issues and Concerns

Issues and concerns affecting this proposal were identified from past National Park Service planning efforts, and input from state and federal agencies. In addition to meeting the primary objectives of the project, several critical issues have also been identified relative to relocation of the Georgia State Memorial. These issues were identified during internal and public scoping for the proposed action.

- Given its present location, visitors cannot readily see or access the Georgia State Memorial, nor fully appreciate its historic significance as an integral park of the park story.
- The present, spatially isolated location of the Georgia State Memorial threatens further deterioration of this significant National Register of Historic Places property, as it puts the memorial at greater risk for structural damage by undetected vandalism, vegetation encroachment, and environmental impacts (i.e., tree blow downs).

1.5.2 Impact Topics

Based in part on the issues raised during internal scoping, a number of resources and values have been identified that potentially could be affected by implementation of the proposed action. These resources and values generated “impact topics” for further analysis, as set forth in Table 1.1. Candidate impact topics were identified based on legislative requirements, executive orders, topics specified in *Director’s Order #12 and Handbook* (NPS 2001), *Management Policies 2006* (NPS 2006), guidance from the National Park Service, input from other agencies, public concerns, and resource information specific to Vicksburg National Military Park.

TABLE 1.1
IMPACT TOPICS AND APPLICABLE LEGAL AND POLICY REQUIREMENTS

Impact Topic	Relevant Regulations or Policies
Climate Change	National Park Service Management Policy 1.6 (2006)
Air Quality	Federal Clean Air Act (CAA); CAA Amendments of 1990 (CAAA); National Park Service Management Policy, 4.7.1 (2006)
Aquatic Resources	National Park Service Management Policy 4.6 (2006); Federal Water Pollution Control Act [The Clean Water Act of 1972 (as amended in 1977)]; Magnuson-Stevens Fishery Conservation and Management Act
Hydrology and Water Quality	Executive Order 12088 (Federal Compliance with Pollution Control Standards); Executive Order 11990 (Protection of Wetlands); National Park Service Management Policy 4.6.3 (2006); Federal Water Pollution Control Act [The Clean Water Act of 1972 (as amended in 1977)]
Floodplains and Wetlands	Executive Order 11990 (Protection of Wetlands); Clean Water Act Section 404; National Park Service Director's Order #77-1; Executive Order 11988 (Floodplain Management); Federal Coastal Zone Management Act; National Park Service Management Policies 4.6.4, 4.6.5, and 9.1.1.6 (2006)
Geology	National Park Service Management Policy 4.8 (2006)
Soils	National Park Service Management Policy 4.8.2.4 (2006)
Vegetation	National Park Service Management Policy 4.4.2 (2006) ; Executive Order 13112 (Invasive Species)
Fish and Wildlife	National Park Service Management Policy 4.4.2 (2006); Executive Order 13186 (Migratory Birds)
Species of Special Concern and their Habitats	Endangered Species Act of 1973; National Park Service Management Policy 4.4.2.3 (2006); 40 Code of Federal Regulations 1500 (regulations for implementing the National Environmental Policy Act)
Ecologically Critical Areas or other Unique Natural Resources	36 Code of Federal Regulations 62 (criteria for national natural landmarks); National Park Service Management Policies (2006)
Natural Soundscape/Noise	National Park Service Management Policy 4.9 (2006)
Natural Lightscape (night sky)	National Park Service Management Policy 4.10 (2006)

Cultural Resources (i.e., important scientific, archeological, and other cultural resources, including historic properties listed or eligible for the National Register of Historic Places)	Section 106 of the National Historic Preservation Act (16 U.S.C. 470 et seq.); Section 110 of the National Historic Preservation Act; 36 Code of Federal Regulations 800; Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR Part 68); National Environmental Policy Act (42 U.S.C. 4321 et seq.); Executive Order 13007 (Indian Sacred Sites); National Park Service Director's Order 28; National Park Service Management Policy 5.3.5 (2006); Native American Graves Protection and Repatriation Act (NAGPRA); Archeological Resources Protection Act (ARPA); National Parks Act of August 25, 1916 ("Organic Act"); Antiquities Act of 1906; 40 CFR 1500 (regulations for implementing National Environmental Policy Act), section 1508.27
Sacred Sites	Executive Order 13007 (Indian Sacred Sites); National Park Service Management Policy 5.3.5.3.2 (2006)
Indian Trust Resources	Department of the Interior Secretarial Order No. 3206; Secretarial Order No. 3175
Visitor Use and Experience	National Parks Act of August 25, 1916 ("Organic Act"); National Park Service Management Policy 8.2 (2006)
Public Health and Safety	National Park Service Management Policy 8.2.5 (2006); U.S. Coast Guard Boating Safety Regulations
Park Operations	National Park Service Management Policy 9.1 (2006)
Concessionaires and Contracts	National Park Service Management Policy 10.2 (2006)
Economics and Socioeconomics	40 Code of Federal Regulations 1500 (regulations for implementing National Environmental Policy Act)
Transportation (local and regional)	National Park Service Management Policy 9.2 (2006)
Socially or Economically Disadvantaged Populations	Executive Order 12898 (Environmental Justice)
Accessibility for Individuals with Disabilities	National Park Service Management Policy 9.1.2 (2006); Architectural Barrier Act of 1968 (42 U.S.C. 4151 et seq.); Rehabilitation Act of 1973 (29 U.S.C. 701 et seq.); Americans with Disabilities Act of 1990 (Public Law 101-336, 104 Stat. 327); Uniform Federal Accessibility Standards
Mineral and Agricultural Resources	National Park Service Management Policy 8.7 and 8.6.7 (2006)

Prime and Unique Agricultural Lands	Council on Environmental Quality 1980 memorandum on prime and unique farmlands; 40 Code of Federal Regulations 1500 (regulations for implementing National Environmental Policy Act), section 1508.27
Energy Requirements and Conservation Potential; Natural or Depletable Resource Requirements and Conservation Potential	National Park Service Management Policy 9.1.7 (2006) ; 40 CFR 1500 (regulations for implementing National Environmental Policy Act), section 1502.16
Urban Quality, Historic and Cultural Resources, and Design of the Built Environment	40 Code of Federal Regulations 1502.16 (regulations for implementing the National Environmental Policy Act); National Park Service Director's Order #12
Community Character	National Park Service Management Policy 8.11 (2006)
Possible Conflicts between the Proposal and Land Use Plans, Policies, or Controls for the Area Concerned (including local, state, or Indian tribe) and the Extent to which the Park Would Reconcile the Conflict	40 Code of Federal Regulations 1500 (regulations for implementing National Environmental Policy Act), sections 1502.16, 1506.2(d))

All of the impact topics listed above were presented and discussed by the planning team during the scoping process. At the end of this process, the planning team selected a subset of these topics for detailed analysis in the EA, as discussed in more detail below.

1.5.3 Impact Topics Analyzed in this Environmental Assessment

Regulations issued by the Council on Environmental Quality require the National Park Service to “identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review ..., narrowing the discussion of these issues in the statement to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere” (40 CFR 1501.7(a)(3)).

Of the impact topics initially listed, the following were considered environmental issues warranting further study, and are carried through the EA for detailed analysis:

- Historic structures and landscapes
- Public health and safety
- Visitor use and experience, including accessibility for individuals with disabilities
- Park operations

- Energy requirements and conservation potential (This impact topic will be dealt with under the heading “Sustainability and Long-term management.” See section 3.6.5 below.)

1.5.4 Impact Topics Dismissed from Detailed Analysis with Rationale for Dismissal

The resource topics described in this section will not be included or evaluated in this environmental assessment. These impact topics were not identified during scoping as being of concern. Additional reasons for their dismissal are provided below.

Climate Change: Relocation of the Georgia State Memorial would have no measurable impact on climate change. Similarly, ongoing climate change would not affect the Georgia State Memorial in any appreciable way.

Air quality: During relocation of the Georgia State Memorial, there would be highly localized, short-term, negligible impacts on air quality due to the small scale of the project, and because best management practices would be used to minimize fugitive dust and emissions from construction equipment.

Hydrology and Water Quality. The proposed action would have no effects on hydrology or water quality. Best management practices would be employed to minimize any adverse effects to water quality during construction.

Floodplains and wetlands: Executive Orders 11988 and 11990, “Floodplain Management” and “Wetlands,” respectively, require analysis of impacts on floodplains and regulated wetlands. None of the alternatives would occur within or affect a floodplain. There are no wetlands regulated under the provisions of Section 404 of the Clean Water Act, or areas designated as wetlands using the classification system approved by the national Park Service, within the areas of potential effect.

Ecologically critical areas or other unique natural resources: Vicksburg National Military Park does not contain any designated ecologically critical areas, wild and scenic rivers, or other unique natural resources, as referenced in 40 *Code of Federal Regulations* 1508.27.

Endangered, threatened, or protected species and critical habitats: Coordination with the U.S. Fish and Wildlife Service and the Mississippi Department of Natural Resources revealed that no federally or state-listed threatened or endangered species are known to exist at Vicksburg National Military Park, nor does any known critical habitat exist at the park. No further consultation pursuant to Section 7 of the Endangered Species Act is required.

Natural soundscapes: Because of its proximity to the Vicksburg metropolitan area, there is little expectation by visitors of experiencing a natural soundscape in areas adjacent to the Georgia State Memorial. Short-term noise generated by small-scale construction equipment associated with rehabilitation of the house would not noticeably change the

ambient levels of human-caused noise that are typical in the park's urban environment. The project would not have any long-term effects on noise levels in the area.

Conflicts with land use plans, policies, or controls: Whenever actions taken by the National Park Service have the potential to affect the planning, land use, or development patterns on adjacent or nearby lands, the effects of these actions must be considered. None of the alternatives addressed in this assessment would have the potential to affect other land use plans, policies, or controls.

Archeological resources: The potential for finding *in situ* prehistoric or historic archeological remains at the site of the Georgia State Memorial is very low because of the amount of soil disturbance around the structure during the Civil War and during subsequent 20th century landscape modifications. Nevertheless, the mitigation measures spelled out in this EA (see below) describe the measures to be taken in the unlikely event that archeological resources are discovered during the course of the project.

Paleontological resources: There are no known paleontological resources in the immediate project area.

Museum Collections. None of the park's museum collections would be affected by implementation of any alternative.

Indian trust resources: Indian trust assets are owned by American Indians but are held in trust by the United States. According to Vicksburg National Military Park staff, Indian trust assets do not occur within the park. Therefore, there would be no effects on Indian trust resources from any of the alternatives.

Soils, Vegetation, and Wildlife. The area around the Georgia State Memorial is disturbed soil covered by mowed lawn; trees flanking the lawn have grown up during the recent past. There are no threatened or endangered species within the project area. The Georgia State Memorial is within an urban area with limited habitat for wildlife.

Wilderness: There are no wilderness areas within Vicksburg National Military Park.

Socioeconomic environment: Council on Environmental Quality regulations for implementing the National Environmental Policy Act (NEPA), 40 CFR 1500, direct economic analyses of federal actions that will affect local or regional economies. None of the alternatives described in this environmental assessment would have notable effects on local or regional economic activities because of their small scale and limited temporal span.

Natural or depletable resource requirements and conservation potential: The use of fuel is addressed under the category "Energy requirements and conservation potential." To the maximum extent possible, the relocation of the Georgia State Memorial would use the original materials. The use of new construction materials that would be incorporated

into a new memorial base foundation and would not be detectable compared to the volumes of these materials used for other construction in the Vicksburg area.

Prime and unique agricultural lands: Prime farmland has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Unique agricultural land is land other than prime farmland that is used for production of specific high value food and fiber crops. Both categories require that the land is available for farming uses. Lands within Vicksburg National Military Park are not available for farming and therefore do not meet the definitions.

Environmental Justice. Executive Order 12898, "General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. None of the alternatives analyzed in this assessment would have disproportionate effects on populations as defined by the U.S. Environmental Agency's 1996 guidance on environmental justice.

2.0 PROJECT ALTERNATIVES

This section of the EA considers a total of three alternatives for meeting the objectives described above in the “Purpose and Need” section. These alternatives include two (2) “action” alternatives and one “no-action” alternative. The no action alternative would involve the continuation of current management.

As part of the design analysis and project planning, a range of alternatives was considered. Those actions or alternatives that were not realistically feasible or did not adequately meet the project purpose and need were dismissed. A discussion of the actions or alternatives that were eliminated from further consideration follows the description of the No Action Alternative and the two action alternatives.

2.1 Alternative A – No Action (continue current management)

Regulations promulgated by the President’s Council on Environmental Quality (CEQ) require National Park Service to consider a “no action” alternative. The no action alternative serves as a baseline against which to compare the impacts of the other alternatives under consideration.

In the present instance, the No Action Alternative is defined as continuation of current management of the Georgia State Memorial. The No Action Alternative provides a basis for comparing the management direction and environmental consequences of the action alternatives. Should the No Action Alternative be selected, the National Park Service would respond to future needs and conditions associated with the Georgia State Memorial without major actions or changes from the present course. Currently, cyclical maintenance activities include mowing, vegetation encroachment, tree blow-downs, and vandalism. Minor repairs are made as problems are reported. These actions would continue under Alternative A. Over the long term, if the Georgia State Memorial suffered major deterioration, it would not be rehabilitated or restored, resulting in the loss of a significant historic structure and a vital interpretive opportunity.

2.2 Alternative B – Relocation of the Georgia State Memorial (Preferred Alternative)

Under Alternative B, the memorial would be moved approximately 300 ft closer to the park tour road. The memorial will still be situated in an area of historical integrity as it will rest along the line occupied by Brig. Gen. Alfred Cumming’s Georgia Brigade during the Siege of Vicksburg. This alternative would provide better visual access from the vehicles traveling the tour route, and also a safer means of visitor access. The memorial would be placed closer to the tour road through use of a crane and other appropriate machinery to lift and relocate the monument. A new concrete foundation would be constructed at this location, which would allow for a stronger, better anchored base pad for the memorial. The old foundation pad would be removed and the area re-landscaped. As the monument would be located much closer to the Tour Stop 14 parking area, visitors would be afforded a better opportunity to approach the memorial from the roadside. Additionally, interpretive media would be placed to draw greater attention to the memorial’s

location and accessibility. This alternative would better ensure the health, comfort, safety, and security of visitors, as well as complying with applicable accessibility regulations.

2.3 Alternative C– Construct an Accessible Footpath to the Georgia State Memorial in its Current Location

The memorial would remain in its current position and a maintained footpath would be created, leading from the tour road to and around the memorial. The footpath would be graded and sloped per ADA-compliant specifications using approved machinery and construction methods, allowing for improved access by all visitors. The path would be paved with appropriate material, such as recycled-content rainbow turf or recommended aggregate which comply with accessibility regulations, and would offer visitors a safer access route to the memorial. Additionally, interpretive media would be placed to draw greater attention to the memorial's location and accessibility.

Table 2.1 provides a summary of the elements associated with each of the alternatives evaluated in this environmental assessment.

Table 2.1: Comparison of the Elements of Each Alternative

Element	<u>Alternative A</u> No action / Continue Current Management	<u>Alternative B</u> Relocation of Georgia State Memorial (Preferred Alternative)	<u>Alternative C</u> Construct Maintained, Accessible Footpath to Georgia State Memorial in its Current Location
Structure General and Exterior	Ongoing inspections and general maintenance (mowing, etc.) to ensure landscape appearance and damage from vandals is repaired.	Relocate closer to park tour road (move of 300 ft) to provide greater visual presence and visitor accessibility.	Construct maintained, accessible footpath to memorial in its current location, using approved paving materials.
Site and Landscape	Same as above.	Same as above.	Same as above.

2.4 Mitigation Measures

For all action alternatives, best management practices and mitigation measures would be used to prevent or minimize potential adverse effects associated with the project. These

practices and measures would be incorporated into the project construction documents and plans.

Resource protection measures undertaken during project implementation would include, but would not be limited to, those listed in below in Table 2.2. The impact analyses in the “Affected Environment and Environmental Consequences” section were performed assuming that these best management practices and mitigation measures would be implemented as a part of all the action alternatives.

Table 2.2: Mitigation measures and Best Management Practices

Potential Adverse Effect on:	Mitigation Measure or Best Management Practice
Cultural Resources	<p>If not already accomplished, extant historic portions of the memorial that require reconstruction or restoration would be documented as called for in the <i>Secretary of the Interior’s Standards for the Treatment of Historic Properties</i> (NPS 1995b) prior to any disassembly.</p> <p>Documentary evidence from period plans, maps, and drawings and from the presence of existing structural elements would be used to provide for accurate reconstruction and rehabilitation of the structure. Wherever possible, the design, texture, color, materials, and scale of the original elements would be ascertained from existing information.</p> <p>New materials (i.e., concrete foundation pad) would be carefully selected to accurately replicate the form and character of the original monument construction.</p> <p>To limit impacts on the landscape around the Georgia State Memorial, wherever possible construction activities such as storage of new or removed materials, vehicular traffic, staging areas, and movement and placement of machinery would occur in a previously disturbed area away from the view of park visitors.</p> <p>To minimize ground disturbance, all staging areas, materials stockpiling, vehicle storage, and other construction-related facilities and areas would be located in a previously disturbed area or on hardened surfaces such as the existing parking areas. Mortar would be mixed at the staging areas and transported to the Georgia State Memorial site.</p> <p>Areas around the Georgia State Memorial disturbed by restoration and rehabilitation would be revegetated with grass and landscape plantings and other landscape elements as appropriate. The types and locations of replacement vegetation would be carefully chosen to, where possible, replicate historic elements of the cultural landscape while avoiding</p>

	<p>introduction of problem exotic plants.</p> <p>Historical, architectural, and archeological records would be reviewed to determine the levels of previous disturbance in the area of potential effect. Should areas of archeological potential be identified, further investigations would be conducted and appropriate mitigating measures would be developed prior to ground-disturbing activities.</p> <p>Potential ground-disturbing activities such as removal of existing landscape features would be carefully planned because these areas may harbor presently unknown archeological resources. Construction documents would include stop-work provisions should archeological resources be uncovered and the contractor would be apprised of these protective measures during the pre-construction conference. Areas known to contain sensitive cultural resources would be identified in the construction operations plan.</p> <p>Work limits would be established and clearly marked to protect resources, and all protection measures would be clearly stated in the construction specifications. Workers would be instructed to avoid conducting activities beyond the construction zone and their compliance monitored by the project Contracting Officer's Technical Representative.</p> <p>Archeological monitoring of ground disturbance in currently inaccessible paved areas or areas beneath and adjacent to existing structures would help ensure that all cultural resources were identified and documented during the construction process.</p> <p>If previously unknown archeological resources were discovered, work would be stopped in the area of any discovery, protective measures would be implemented, and procedures outlined in 36 <i>Code of Federal Regulations</i> 800 would be followed. Resources would be evaluated for their National Register of Historic Places significance, and adequate mitigation of project impacts (in consultation with appropriate agencies) and adjustment of the project design would take place to avoid or limit the adverse effects on resources.</p> <p>Personnel would be educated about the nature of the cultural resources at the project site and the need for protection. Stop-work provisions would be included in construction documents in the event that archeological resources were uncovered. Although, in many cases, the preferred method to protect identified archeological resources is to avoid further disturbance by relocation of the impact to another non-sensitive site, the preferred method here would be professional documentation of the find prior to additional ground-disturbing activities.</p>
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	<p>To reduce unauthorized collecting, construction personnel would be educated about cultural resources in general and the need to protect any cultural resources encountered. Work crews would be instructed regarding the illegality of collecting artifacts on federal lands to avoid any potential Archeological Resources Protection Act violations. This would include instructions for notifying appropriate personnel if human remains were discovered.</p>
Construction-related effects on soils	<p>Standard best management practices to limit erosion and control sediment release would be employed. Such measures include use of silt fencing, limiting the area of vegetative disturbance, use of erosion mats, and covering banked soils to protect them until they are reused.</p>
Public Health and Safety	<p>An accident prevention program would be a required submittal. This plan would include job hazard analyses associated with each major phase of the proposed project and would emphasize both worker and public safety. It would include planning for emergency situations, including fires, tornados, building collapse, explosions, power outages, and rainstorms.</p> <p>The plan would also take into consideration the nature of the construction, site conditions, including seasonal weather conditions and the degree of risk or exposure associated with the proposed activity. Regular project inspections and safety meetings would ensure the safety of the premises both to construction staff and visitors.</p> <p>A defined work area perimeter would be maintained to keep all construction-related impacts within the affected area. All paved areas that are subject to vehicular and pedestrian traffic would be kept clean of construction debris and soils. Sweeping of these areas would be implemented as necessary.</p> <p>Visitor safety would be ensured both day and night by fencing of the construction limits of the proposed action. Areas not safe for public entry would be marked and signed for avoidance. Unsafe conditions would be inspected for and corrected as soon as practicable to minimize the potential for staff or visitor injury.</p> <p>To the degree possible, impacts would be mitigated by the use of best management practices to reduce generation of dust and by limits on the types of chemicals (low VOC ratings) used in new construction and the rehabilitation.</p>
Visitor Experience	<p>Educational materials and interpretive information would describe the work and importance of the activity so visitors would understand the the need for relocation. Information would be prepared and distributed to park visitors by park staff. Signage and programs also would provide safety information for visitors.</p>

	<p>Visitor information to minimize adverse effects to visitors from changes in parking availability near Tour Stop 14 (Ft. Garrott) would be developed.</p> <p>Specific provisions would ensure that the majority of material deliveries were made during the week, rather than on weekends or holidays. By the same token, most of the disruptive work would not occur on weekends or holidays. Disruptive early morning or late evening deliveries would be minimized to the extent possible. The contractor will be encouraged to deliver the majority of materials in the early morning hours, before 10:00 a.m.</p> <p>All construction equipment would be equipped with mufflers kept in proper operating conditions, and when possible, equipment would be shut-off rather than allowed to idle. Standard noise abatement measures would include the following elements: a schedule that minimizes impacts to adjacent noise-sensitive areas, use of the best available noise control techniques wherever feasible, use of hydraulically or electrically powered impact tools when feasible, and location of stationary noise sources as far from sensitive public use areas as possible.</p>
Sustainability and Conservation Potential	<p>The contractor would be encouraged to use carpooling and other techniques that would minimize the trip generation of the construction activity. Shipment of materials in full loads would also be encouraged, and vehicles and equipment would be maintained to minimize pollution generation.</p> <p>Relocation of the Georgia State Memorial would incorporate energy efficient and sustainable design to minimize energy consumption.</p>

2.5 Environmentally Preferred Alternative

The NPS Handbook for implementing Director's Order #12 (*Conservation Planning, Environmental Impact Analysis, and Decision Making*) requires that EAs identify the environmentally preferred alternative. Simply put, "this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources." (Q6a) (516 DM 6 4.10(A)(5)).

The Council on Environmental Quality (CEQ) regulations and National Park Service Policy state that environmental assessments prepared pursuant to NEPA must include a section stating how each alternative analyzed in detail would or would not achieve the requirements of NEPA sections 101 and 102(1) and other environmental laws and policies. 40 CFR 1502.2(d). This requirement is met within the National Park Service by (a) describing how each alternative meets the criteria set forth in NEPA section 101(b),

and (b) identifying any conflicts between the alternatives analyzed in detail and other environmental laws and policies.

Section 101(b) of the National Environmental Policy Act identifies six criteria for assessing whether a proposed federal action complies with the national environmental policy as set forth in the act. Specifically, the act directs that a proposed federal action should:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In the National Park Service, the No Action alternative may also be considered in identifying the environmentally preferred alternative. However, in the present instance, continuing current management of the Georgia State Memorial would be the least effective course in meeting the above criteria. Without relocation, there is a strong potential for the Georgia State Memorial to suffer detrimental effects from its visual isolation as impacts from vegetation encroachment, tree damage, or undetected vandalism may go unnoticed for extended periods of time. Additionally, in its present location, the limited access to the memorial poses a safety threat to staff and visitors alike, and a continuation of these conditions would only exacerbate the threat.

Alternatives B and C fully address the park's need to enhance public health and safety and safeguard vital historic resources. The park was created to preserve the cultural and natural resources and interpret for the visiting public the story of this Civil War battlefield. Relocation of the Georgia State Memorial, and providing better visual presence and accessibility to the memorial would improve the park's ability to meet its mandate to preserve these resources. In addition, relocation of the Georgia State Memorial would enhance the visitor opportunities in this part of the park, be consistent with National Park Service policy, and protect public (and staff) health and safety.

Both alternatives B and C would achieve the requirements of NEPA sections 101 and 102(1). However, Alternative B (preferred alternative) would do so by using less long-term energy than Alternative C. Therefore, Alternative B (preferred alternative) is the environmentally preferable alternative. The scoring for the individual alternatives is set forth in Table 2.3 below.

TABLE 2.3: ENVIRONMENTALLY PREFERABLE ALTERNATIVE ANALYSIS

CRITERIA	ALTERNATIVES		
	A	B	C
1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.	2	5	5
2. Ensure safe, healthful, productive, and aesthetically and culturally pleasing surroundings for all Americans.	1	5	5
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.	2	5	4
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and a variety of individual choices.	2	5	5
5. Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.	2	5	4
6. Enhance the quality of renewable resources through use of recycled content materials (i.e., rainbow turf).	2	5	5
Total Points*	11	30	28

* Five points were given to the alternative if it fully meets the criteria; four points if it meets nearly all of the elements of the criteria; three points if it meets more than one element of the criteria; two points if it meets only one element of the criteria; and one point if the alternative does not meet the criteria.

2.6 How the Alternatives Meet the Objectives of the Proposed Action

Table 2.4 provides a comparative summary of alternatives and whether each alternative would meet the project objectives. As shown on the table, both action alternatives would successfully meet all of the objectives of this project. The alternative of no action/continue current management would not meet any of the project objectives.

Table 2.4: Ability of the Alternatives to Meet Project Objectives

Objectives	Alternative A No Action/Continue Current Management	Alternative B Relocation of Georgia State Memorial (Preferred Alternative)	Alternative C Construct Maintained, Accessible Footpath to Georgia State Memorial in it Current Location
Protect cultural resources by preventing loss of these resources and by maintaining and improving the condition of the resources.	No	Yes	Yes
Protect public, health, safety, and welfare.	No	Yes	Yes
Improve the efficiency of park operations.	No	Yes	Yes

2.7 Summary of Impacts

Table 2.5 briefly summarizes the effects of each of the alternatives on the impact topics that were retained for analysis. More detailed information on the effects of the alternatives is provided in the “Affected Environment and Environmental Consequences” section.

Table 2.5: Summary of Environmental Impacts

Impact Topic	<u>Alternative A</u> No Action/Continue Current Management	<u>Alternative B</u> Relocation of Georgia State Memorial (Preferred Alternative)	<u>Alternative C</u> Construct Maintained, Accessible Footpath to Georgia State Memorial in it Current Location
Historic structures and landscapes	Continuing current management would have impacts to the historic structure that were long-term, direct, moderate to major, and adverse. Impacts to cultural landscapes would continue as at present. Impacts would be long-term, direct, minor, and adverse.	Relocation of the Georgia State Memorial would have impacts to the historic structure that were long-term, direct, moderate, and beneficial. Site enhancements for accessibility and public safety would result in impacts to the cultural landscape that were long-term, direct, minor to moderate, and adverse.	Impacts would generally be the same as Alternative B.
Visitor use and experience, including accessibility for individuals with disabilities	Continued location of the Georgia State Memorial would result in impacts to visitor use and experience that were long-term, direct, moderate to major, and adverse.	By allowing public greater visual presence and accessibility to the Georgia State Memorial, as well as making possible associated interpretive programs, relocation of the Georgia State Memorial would result in impacts to visitor use and experience that were long-term, direct, moderate to major, and beneficial.	Generally the same as Alternative B. Impacts to visitor use and experience would be long-term, direct, moderate to major, and beneficial.
Public health and safety	Continuing current management would protect public health	Alternative B would enhance public health and safety by	Same as Alternative B. Impacts to public health and safety

	and safety, but would do so by relying on short-term measures rather than permanent rehabilitation. Impacts to public health and safety would be long-term, direct, minor, and adverse.	providing better, safer access to the Georgia State Memorial. Impacts to public health and safety would be long-term, direct, minor to moderate, and beneficial.	would be long-term, direct, minor to moderate, and beneficial.
Park operations	Ongoing repair and maintenance of the Georgia State Memorial would create long-term, direct, adverse effects on park operations of moderate intensity as the escalating deterioration diverted staff from other necessary park functions.	Park operations would experience long-term, direct, minor benefits as the need for maintenance and the repair burden was reduced. Emergency repair activities would be replaced by lower-intensity regular maintenance, and staff could focus their attention on other resource and park management matters.	Same as Alternative B.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

The National Environmental Policy Act requires before any federal agency undertakes a major action, it must discuss the environmental impacts of that action, feasible alternatives to that action, and any adverse environmental effects that cannot be avoided if the proposed action is implemented. Accordingly, this section describes the environmental consequences associated with the alternatives. It is organized by impact topics, which allow a standardized comparison between alternatives based on issues. Consistent with NEPA, the analysis also considers the context, intensity, and duration of impacts, indirect impacts, cumulative impacts, and measures to mitigate impacts. National Park Service policy also requires that “impairment” of resources be evaluated in all environmental documents.

The first part of this section discusses the methodology used to identify impacts and includes definitions of terms. The impact topics are then analyzed with reference to each of the three alternatives. The discussion of each impact topic includes a description of the affected environment for that topic, an analysis of the positive and negative effects of each alternative, a discussion of cumulative effects, if any, and a conclusion. The conclusion includes a discussion of whether, and to what extent, the alternative would impair park resources and values.

3.2 Methodology

Generally, the methodology for resource impact assessments follows direction provided in the Council on Environmental Quality (CEQ) Regulations for Implementing the National Environmental Policy Act, Parts 1502 and 1508. The impact analysis and the conclusions in this part are based largely on the review of existing literature and park studies, information provided by experts within the National Park Service and other agencies, park staff insights and professional judgment.

The impacts from the three alternatives were evaluated in terms of the context, duration, and intensity of the impacts, as defined below, and whether the impacts were considered beneficial or adverse to park resources and values.

3.2.1 Context

Each impact topic addresses effects on resources inside and outside the park, to the extent those effects are traceable to the actions set forth in the alternatives.

3.2.2 Duration

Short term Impacts – Those that would occur within one year of construction.

Long-term Impacts – Those that would continue to exist after completion of construction.

3.2.3 Impact Intensity

3.2.3(a) Intensity Definitions for Impact Topics Analyzed in this Document

For this analysis, intensity or severity of impact is defined as follows:

TABLE 3.1: IMPACT INTENSITY DEFINITIONS

Impact Topic	Negligible	Minor	Moderate	Major
CULTURAL RESOURCES				
Historic Structures	The impact would be at the lowest level of detection or barely perceptible and not measurable. For purposes of section 106, the determination of effect would be <i>no adverse effect</i> .	The impact would not affect the character defining features of a structure or building listed on or eligible for the National Register of Historic Places. For purposes of section 106, the determination of effect would be <i>no adverse effect</i> .	The impact would alter a character defining feature(s) of the structure or building but would not diminish the integrity of the resource to the extent that its national register eligibility would be jeopardized. For purposes of section 106, the determination of effect would be <i>no adverse effect</i> .	The impact would alter a character defining feature(s) of the structure or building, diminishing the integrity of the resource to the extent that it is no longer eligible to be listed on the national register. For purposes of section 106, the determination of effect would be <i>adverse effect</i> .
Cultural Landscapes	The impact is at the lowest levels of detection or barely perceptible and not measurable. For purposes of section 106, the determination of effect would be <i>no adverse effect</i> .	The impact would not affect the character defining features of a cultural landscape listed on or eligible for the National Register of Historic Places. For purposes of section 106, the determination of effect would be <i>no adverse effect</i> .	The impact would alter a character defining feature or features of the cultural landscape but would not diminish the integrity of the landscape to the extent that its national register eligibility would be jeopardized. For purposes of section 106, the determination of	The impact would alter a character defining feature(s) of the cultural landscape, diminishing the integrity of the resource to the extent that it would no longer be eligible to be listed on the national register. For purposes of section 106, the

Impact Topic	Negligible	Minor	Moderate	Major
			effect would be <i>no adverse effect</i> .	determination of effect would be <i>adverse effect</i> .
VISITOR USE AND EXPERIENCE				
Visitor Use and Experience (including accessibility for individuals with disabilities)	Visitors would likely be unaware of any effects associated with implementation of the alternative. There would be no noticeable changes in visitor use and/or experience or in any defined indicators of visitor satisfaction or behavior.	Changes in visitor use and/or experience would be slight but detectable, but would not appreciably diminish or enhance critical characteristics of the visitor experience. Visitor satisfaction would remain stable.	Few critical characteristics of the desired visitor experience would change and/or the number of participants engaging in an activity would be altered. The visitor would be aware of the effects associated with implementation of the alternative and would likely be able to express an opinion on the changes. Visitor satisfaction would begin to either decline or increase as a direct result of the effect.	Multiple critical characteristics of the desired visitor experience would change and/or the number of participants engaging in an activity would be greatly reduced or increased. The visitor would be aware of the effects associated with implementation of the alternative and would likely express a strong opinion about the change. Visitor satisfaction would markedly decline or increase.

Impact Topic	Negligible	Minor	Moderate	Major
Public Health and Safety	Public health and safety would not be affected, or the effects would be at low levels of detection and would not have an appreciable effect on the public health or safety.	The effect would be detectable, but would not have an appreciable effect on public health and safety.	The effect would be readily apparent, and would result in substantial, noticeable effects on public health and safety on a local scale. Changes in rates or severity of injury could be measured.	The effects would be readily apparent, and would result in substantial, noticeable effects on public health safety on a regional scale. Changes could lead to changes in mortality.
NPS OPERATIONS AND MANAGEMENT				
Park Operations	The effect would be at or below the level of detection, and would not have an appreciable effect on park operations and management.	The effects would be detectable, but would be of a magnitude that would not have an appreciable effect on park operations and management.	The effects would result in a change in park operations and management in a manner readily apparent to staff and possibly to the public.	The effects would result in a substantial and widespread change in park operations and management in a manner readily apparent to staff and the public.

3.2.3(b) Impacts on Cultural Resources and Section 106 of the National Historic Preservation Act

Cultural resources typically are understood to include archeological sites, buildings, structures, districts, landscapes, and objects, along with ethnographic sites and landscapes, as defined in the National Historic Preservation Act. The National Historic Preservation Act (NHPA) and its implementing regulations provide guidance for deciding whether cultural resources are of sufficient importance to be determined eligible for listing on the National Register of Historic Places. Historic properties (i.e., archeological, landscape, collections, and ethnographic resources) determined to be eligible for listing in the National Register of Historic Places must be associated with an important historic context, i.e. possess significance – the meaning or value ascribed to the item, and have integrity of those features necessary to convey its significance, i.e., location, design, setting, workmanship, materials, feeling and association.

An adverse effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the National Register. Adverse effects could include diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association. Adverse effects also include reasonably foreseeable effects caused by the alternative that would occur later in time, be farther removed in distance, or be cumulative (36 *Code of Federal Regulations* Part 800.5, Assessment of Adverse Effects). A determination of no adverse effect means there is an effect, but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion in the National Register. Beyond the requirements of Section 106 of the NHPA, the park will consider all sites to be eligible for the National Register of Historic Places until an evaluation is done to determine a property's true eligibility.

In this document, impacts to archeological resources, historic structures, and cultural landscapes are described in terms of type, context, duration, and intensity, which is consistent with the regulations of the Council on Environmental Quality that implement NEPA. These impact analyses are intended, however, to comply with the requirements of both NEPA and Section 106 of the NHPA. In accordance with the Advisory Council on Historic Preservation's regulations implementing Section 106 of the NHPA (36 CFR Part 800, Protection of Historic Properties), impacts on cultural resources were also identified and evaluated by (1) determining the area of potential effects; (2) identifying cultural resources present in the area of potential effects that are either listed in or eligible to be listed in the National Register of Historic Places; (3) applying the criteria of adverse effect to affected, national-register-eligible or -listed cultural resources; and (4) considering ways to avoid, minimize, or mitigate adverse effects.

The Advisory Council's regulations for Section 106 compliance require a determination of either *adverse effect* or *no adverse effect* for affected national-register-listed or -eligible cultural resources. An *adverse effect* occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the national register, e.g., diminishing the integrity (or the extent to which a resource retains its historic appearance) of its location, design, setting, materials, workmanship, feeling, or association. Adverse effects also include reasonably foreseeable effects caused by actions proposed in the alternatives that would occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5, *Assessment of Adverse Effects*). A determination of *no adverse effect* means there is an effect, but the effect would not diminish the characteristics of the cultural resource that qualify it for inclusion in the National Register. Beyond the requirements of Section 106 of the NHPA, the park will consider all sites to be eligible for the National Register of Historic Places until an evaluation is done to determine a property's true eligibility.

CEQ regulations and the National Park Service's *Conservation Planning, Environmental Impact Analysis and Decision Making* (Director's Order #12) also call for a discussion of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, e.g., reducing the intensity of an impact from major to moderate or minor. Any resultant reduction in intensity of impact due to mitigation,

however, is an estimate of the effectiveness of mitigation under NEPA only. It does not suggest that the level of effect as defined by Section 106 is similarly reduced. Cultural resources are nonrenewable resources, and adverse effects generally consume, diminish, or destroy the original historic materials or form, resulting in a loss in the integrity of the resource that can never be recovered. Therefore, although actions determined to have an adverse effect under Section 106 may be mitigated, the effect remains adverse.

A Section 106 summary is included in the impact analysis sections. The Section 106 summary is an assessment of the effect of the undertaking (implementation of the alternative), based upon the criterion of effect and criteria of adverse effect found in the Advisory Council's regulations. For purposes of this environmental assessment, the discussion of historic resources (structures) is combined with cultural landscapes. Impact topics related to archeological resources, collections, and ethnographic resources were dismissed (see "Impact Topics Dismissed from Further Analysis with Rationale for Dismissal").

Definitions of impact intensity as regards historic structures and cultural landscapes are set forth in Table 3.1.

3.2.4 Impact Type

CEQ regulations and the National Park Service's *Conservation Planning, Environmental Impact Analysis and Decision-making* (Director's Order #12) call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, e.g. reducing the intensity of an impact from major to moderate or minor. The action alternative assumes that park managers would apply mitigation measures to minimize or avoid impacts (see Table 2.2 above). If appropriate mitigation measures were not applied, the potential for resource impacts would increase and the magnitude of those impacts would rise.

3.2.5 Direct versus Indirect Impacts

Direct effects would be caused by an action and would occur at the same time and place as the action. Indirect effects would be caused by the action and would be reasonably foreseeable but would occur later in time, at another place, or to another resource.

3.3 Cumulative Impacts

Regulations implementing NEPA issued by the CEQ require the assessment of cumulative impacts in the decision-making process for federal actions. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The cumulative impacts analyzed in this document consider the incremental effects of the three alternatives in conjunction with past, current, and future actions at the park. Cumulative impacts were determined by combining the effects of a given alternative with other past, present, and reasonably foreseeable future actions. The impact analysis and conclusions are based on information available in the literature, data from National Park Service studies and records, and information provided by experts within the National Park Service and other agencies. Unless otherwise stated, all impacts are assumed to be direct and long-term.

To assess cumulative impacts, it was necessary to identify other past, ongoing, or reasonably foreseeable future actions at and around Vicksburg National Military Park. Past and ongoing actions include, but are not limited to:

- The original construction of the Georgia State Memorial, and its ongoing maintenance;
- Future interpretation and education programs at the park;
- Continuing loss of historic structures in the area;

Reasonably foreseeable projects and plans in the immediate vicinity of the Georgia State Memorial were identified previously under “Other Projects and Plans” in the “Purpose and Need” section. Other reasonably foreseeable projects and plans include the continuing development of the Vicksburg, Mississippi, metropolitan area and the region.

3.4 Impairment of Park Resources or Values

In addition to determining the environmental consequences of the preferred and other alternatives, the 2006 NPS *Management Policies* and Director’s Order 12 require analysis of potential effects to determine if actions would impair park resources or values.

The fundamental purpose of the National Park System, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, is to conserve the resources and values of each unit of the system. Although Congress has given the National Park Service management discretion to allow certain impacts within individual units, that discretion is limited by statutory requirement that the National Park Service must leave resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of unit resources or values, including opportunities that otherwise would be present for the enjoyment of those resources or values. Impairment may result from National Park Service activities in managing the unit, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the unit.

To determine whether actions and management prescriptions involving park resources would result in impairment, each alternative was evaluated to determine if it had a major adverse effect on a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation of Vicksburg National Military Park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the General Management Plan or other relevant National Park Service planning documents.

A determination on impairment is included in the impact analysis section for all impact topics relating to park resources and values.

3.5 Topics Dismissed from Further Analysis

The topics dismissed from further analysis, and the reasons therefore, are discussed in section 1.5.4 of this document.

3.6 Analysis of Impact Topics

For each impact topic analyzed below, the analysis includes a brief description of the affected environment and an evaluation of the effects of implementing each alternative. Developing the impact analyses has involved the following steps:

Define issues of concern, based on internal and external scoping.

Identify the geographic area that could be affected.

Define the resources within that area that could be affected.

Impose the action on the resources within the area of potential effect.

Identify the effects caused by the alternative, in comparison to the baseline represented by the No Action Alternative, to determine the relative change in resource conditions.

Characterize the effects based on the following factors:

- Whether the effect would be beneficial or adverse.
- The intensity of the effect, either negligible, minor, moderate, or major. Impact-topic-specific thresholds for each of these classifications are provided in Table 3.1. Threshold values were developed based on federal and state standards, consultation with regulators from applicable agencies, and discussions with subject matter experts.
- Duration of the effect, either short-term or long-term, as well as the area affected by the alternative.
- Whether the effect would be a direct result of the action or would occur indirectly because of a change to another resource or impact topic. An example of an indirect impact would be increased structural deterioration that would occur due to opening the house to visitation without appropriate safeguards.

Determine whether impairment would occur to resources and values that are considered necessary and appropriate to fulfill the purposes of Vicksburg National Military Park.

Determine cumulative effects by evaluating the effect in conjunction with the past, current, or foreseeable future actions for Vicksburg National Military Park and the region.

3.6.1 HISTORIC STRUCTURES AND LANDSCAPES

3.6.1.1 Background

On February 21, 1899, Vicksburg National Military Park was established to commemorate the campaign and siege and defense of Vicksburg, and in recognition of the historical importance of this battleground along the north, east, and south edges of the city of Vicksburg. Originally, the park encompassed about 1,200 acres and included the national cemetery, land area of the Union siege lines, some of the original earthworks, and the Confederate defense lines used during the 1863 military action. The establishing act mandated that the park maintain the “present outlines of field and forest,” that is, preserve the historic scene. States were given the authority to establish and place markers and memorials honoring units involved in the siege. The legislation also required that the earthworks used during the Siege of Vicksburg in 1863 be restored.

In 1933, administration of the nation’s military parks was transferred from the War Department to the Department of the Interior. The National Park Service was given jurisdiction of the park and it was added to the National Park System.

The Georgia State Memorial stands 300 ft southwest of Tour Stop 14 (Ft. Garrott) on the VNMP tour road. Dedicated on October 25, 1962, the structure specifically memorializes those Georgia soldiers who died at Vicksburg, and is identical to the Georgia memorials placed at Gettysburg and Antietam.

3.6.1.2 Affected Resources

Historic Structure. The Georgia State Memorial stands 300 ft southwest of Tour Stop 14 (Ft. Garrott) on the VNMP tour road. It was designed by Harry Sellers, and erected by Marietta Memorials, Inc., of Atlanta, Georgia. It is made of polished granite, with an 8 ft x 8 ft x 4 ft stepped base and pedestal supporting a 3 ft x 3 ft x 12 ft straight shaft. The shaft is inscribed and incorporates the Georgia state seal, and the word GEORGIA appears in raised letters at the fluted top of the shaft.

Cultural Landscape. Historic cultural landscapes represent a complex subset of cultural resources resulting from the interaction between people and the land. Cultural landscapes are shaped through time by historical land-use and management practices, politics, war, property laws, levels of technology, and economic conditions. Cultural landscapes are a living record of an area’s past, providing a visual chronicle of its history. The dynamic

nature of human life contributes to the continual reshaping of cultural landscapes. This makes them a good source of information about specific times and places, but renders their long-term preservation a challenge.

A cultural landscape by definition occupies a geographic area that incorporates natural and cultural elements that are associated with a historic activity, event, or person. The National Park Service recognizes four categories:

- historic designed landscapes (i.e., incorporates a deliberate human element to the modification and use of a particular piece of land),
- historic vernacular landscapes (reflects on values and attitudes about land over time),
- historic sites (sites significant for their association with important events, activities, and people; at these areas, existing features and conditions are defined and interpreted primarily in terms of what happened there at particular times in the past), and
- ethnographic landscapes (landscapes associated with contemporary groups that use the land in a traditional manner).

The character-defining features of a cultural landscape include spatial organization and land patterns; topography; vegetation; circulation patterns; water features; and structures or buildings, site furnishings, and objects (*Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, 1996).

A Cultural Landscape Report was completed for the park in October 2009 (NPS 2009). The report identifies historic-character-defining features of the park, analyzes the landscape's National Register significance and integrity, and identifies preferred treatments, including a strategy for battlefield restoration. Generally speaking, the cultural landscape of the park encompasses the historic landscape of the battlefield, as well as its monuments, roads, earthworks, and structures. The Georgia State Memorial and its immediate surroundings form an integral and vital part of the park's cultural landscape.

The Georgia State Memorial was originally situated on the park tour road, along the portion of the VNMP tour road which connected the current park tour road with Confederate Avenue now located outside the park's southern boundary. In the mid-1960s, Congress directed that the lower third of VNMP be turned over to the City of Vicksburg. Consequently, the park's tour road was turned into a 'closed loop' route within the park by removal of the pavement between the park tour road and city-owned road.

Circulation patterns form an important part of the Georgia State Memorial landscape. Originally located along the tour route, the memorial became visually isolated after the southern portion of VNMP was quitclaimed to the City of Vicksburg, and that section of pavement removed. Currently, while traveling the park tour road, attention is

predominantly focused on the Ft. Garrott earthwork at Tour Stop 14, and the visual presence of the Georgia State Memorial is often missed, thereby depriving the visitor of an integral part of the overall landscape that conveys a special sense of place and history.

Cultural Resources Listed in the National Register of Historic Places. The analysis of project impacts on cultural resources focuses on historic properties, which include that subset of cultural resources that are listed in, or eligible for listing in, the National Register of Historic Places. Within the area evaluated in this document, historic properties are Vicksburg National Military Park and Cemetery, which were listed in the National Register of Historic Places in 1966, and the Shirley House (listed in the National Register of Historic Places in 1977). General Pemberton's Headquarters is also a National Historic Landmark.

3.6.1.3 Environmental Consequences

ALTERNATIVE A (No Action/Continue Current Management)

Analysis. Under Alternative A, the National Park Service would maintain the Georgia State Memorial in its current location. The structure would remain visually isolated from visitors. The current maintenance measures would be maintained. Impacts to the historic structure would be long-term, direct and indirect, moderate to major, and adverse. Impacts to cultural landscapes would continue as at present. Impacts would be long-term, direct, minor, and adverse.

Cumulative Effects. Continuing current management practices would not improve the spatial isolation of this historic structure, limiting the ability to monitor any natural or vandalism damage. It would also impact interpretive programs at the park by continuing to limit opportunities for interpreting the siege of Vicksburg and its aftermath. Cumulative impacts would be long-term, direct, minor, and adverse.

Conclusion. Continuing current management would have impacts to the historic structure that were long-term, direct, moderate to major, and adverse. Impacts to cultural landscapes would continue as at present, with non-historic elements present on the exterior of the structure. Impacts would be long-term, direct, minor, and adverse. Overall cumulative impacts would be long-term, direct, minor, and adverse.

Impairment. In the short term, the No-action Alternative would not result in impairment of the park's cultural resources or values because the Georgia State Memorial would continue to be maintained, albeit minimally, and would continue to occupy its historic place in the cultural landscape. If, over the long term, regular maintenance failed to improve the visual presence and accessibility to the memorial, major deterioration of the monument could occur.

ALTERNATIVE B (Relocate the Georgia State Memorial):

Analysis. Alternative B would enhance and protect the resource value of the Georgia State Memorial by improving the visual presence and accessibility to the structure. The proposed work would also correct structural deficiencies, thereby allowing the long-term preservation of this important National Register property. This action would help protect this important cultural resource, improving its general condition, effecting preservation as guided by National Park Service standards, protecting it from casualty, and retarding further deterioration. All work performed on the structure would be done in such a way as to minimize impacts on, and allow preservation of, the historic fabric.

Impacts to the cultural landscape would be minor to moderate and adverse. This action would improve accessibility and public safety while having only minor to moderate adverse impacts on the surrounding cultural landscape.

Cumulative Impacts. Alternative B would increase the visual accessibility of this structure, while maintaining the integrity of both the monument location and cultural landscape. Cumulative impacts would be long-term, direct, minor, and beneficial.

Conclusion. Relocation activities would have impacts to the historic structure that were long-term, direct, moderate, and beneficial. Cumulative impacts would be long-term, direct, minor, and beneficial. Site enhancements for accessibility and public safety would result in impacts to the cultural landscape that were long-term, direct, minor to moderate, and adverse.

Impairment. Alternative B would relocate a structure currently visually isolated from the park visitor. Impacts to the surrounding cultural landscape would be minor. Therefore, Alternative B would not result in impairment of park resources and values.

ALTERNATIVE C (Construct Maintained, Accessible Footpath to Georgia State Memorial in its Current Location):

Analysis. Impacts to visitor use and experience under Alternative C would be very similar to those under Alternative B, by allowing better accessibility to the memorial in its current location.

Cumulative Impacts. Same as Alternative B.

Conclusion. Construction of an accessible footpath would have impacts to historic structures that were long-term, direct, moderate, and beneficial. Cumulative impacts would be long-term, direct, minor, and beneficial.

Site enhancements for accessibility and public safety would result in impacts to the cultural landscapes that were long-term, direct, minor, and adverse.

Impairment. Alternative C would allow better visitor access to one of twenty-eight state memorial structures in the park. Impacts to the surrounding cultural landscape would be minor. Therefore, Alternative C would not result in impairment of park resources and values.

Section 106 Summary

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of the preferred alternative (Alternative B – Relocation of the Georgia State Memorial) would not have an adverse effect on historic structures or the cultural landscape of Vicksburg National Military Park.

The environmental assessment includes mitigation measures that would help reduce potential adverse effects on cultural resources, and all work would be performed in compliance with the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (NPS 1995a). For example, construction activities would be carefully planned to avoid damage to historic fabric. Work around the periphery of the structure and in the surrounding landscape would be monitored by an archeologist meeting the Secretary of the Interior's standards.

Wherever feasible, historic elements such as bricks would be retained and reused. New materials (bricks and mortar) of the appropriate color, shape, size, texture, and appearance would be carefully selected to accurately replicate the form and character of the original structure.

Documentary evidence from period plans, maps, and drawings and from the presence of existing structural elements would be used to provide for accurate reconstruction and rehabilitation of the structure. Wherever possible, the design, texture, color, materials, and scale of the original elements would be ascertained from existing information. Prior to initiation of any reconstruction activities, these elements would be carefully documented as described in the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1995b).

To avoid any unauthorized collecting from areas where construction is proposed, work crews would be educated about cultural resources in general and the need to protect any cultural resources encountered. Work crews would be instructed regarding the illegality of collecting artifacts on federal lands to avoid any potential violations. In the unlikely event that previously unknown cultural resources were discovered during construction, work would be halted in the vicinity of the resource, and procedures outlined in 36 *Code of Federal Regulations* 800 would be followed.

The Mississippi State Historic Preservation Office (SHPO) has been involved in this project from the beginning. To complete the Section 106 process, the park will draft an assessment of effect form, which will be forwarded to the SHPO along with this EA.

Previous discussions and communications regarding the project between the National Park Service and the Mississippi SHPO indicate a finding of *no adverse effect* (April

1991), as defined in Section 106 of the National Historic Preservation Act. However, SHPO comments on the project will be addressed in the final compliance documents. Should the need arise, additional mitigation measures also would be developed in consultation with the SHPO.

3.6.2 VISITOR USE AND EXPERIENCE

3.6.2.1 Affected Environment

Vicksburg National Military Park is located on the north side of Vicksburg, Mississippi, less than a mile from Interstate 20. The park receives approximately 1 million visitors per year who stay an average of 2 hours each (NPS 2003d). Travel to the park is accomplished largely by private automobile or by charter bus. The nearest commercial airport is in Jackson, Mississippi, approximately 50 miles to the east (NPS 2003a).

The most popular activity at the park is touring the battlefield and cemetery by car, charter bus, or on foot. The park has a main visitor center with interpretive displays, a bookstore, and a theater that presents an 18-minute introductory film. The visitor center is the usual starting point for embarking on the 16-mile-long interpretive loop that passes through the Union siege and Confederate defense lines.

Vicksburg National Military Park has a high concentration of monuments and historic structures, with over 1,350 monuments, markers, tablets and plaques, 70 bronze castings, 149 cannon and carriages, 9 historic bridges, 6 buildings, and an ironclad river gunboat (the U.S.S. Cairo). Vicksburg National Cemetery also contains approximately 18,000 headstones (NPS 2003a).

Midway through the interpretive loop, visitors encounter the Union gunboat, the U.S.S. Cairo. This ironclad, river class gunboat was sunk in December 1862 by underwater Confederate mines just north of Vicksburg in the Yazoo River. The Cairo was raised in 1964, acquired by Vicksburg National Military Park in 1973, and restored in 1985 to give visitors the opportunity to experience this unique piece of military hardware. The nearby U.S.S. Cairo Museum houses a variety of artifacts recovered from the Cairo during salvage operations (NPS 2003a).

Adjacent to the U.S.S. Cairo is Vicksburg National Cemetery. Established in 1866, it contains 18,300 graves, the identities of more than 13,000 of which are unknown. Most of the dead were Union soldiers from the Civil War, but soldiers from the Spanish-American War, World War I, World War II, and the Korean War also are interred here (NPS 2003a).

Located near the site designated as “Tour Stop No. 14” along the park’s 16-mile-long driving tour route, the Georgia State Memorial is situated on the South Loop along the VNMP tour road 300 ft from the earthwork known as Ft. Garrott. This area was one of the focal point of military operations during the siege and defense of Vicksburg. Every year the park hosts about one million visitors, and the Georgia State Memorial is a key

element in the park's legislative mandate to interpret the history of Vicksburg, including both the battle and the period encompassing the Union occupation of Vicksburg through Reconstruction times.

3.6.2.2 Environmental Consequences

ALTERNATIVE A (No Action/Continue Current Management)

Analysis. Continuing current management would mean that the Georgia State Memorial would remain in its present location and therefore spatially isolated from visitors. Opportunities would thus be lost for interpreting the memorial and its role in the Vicksburg campaign and subsequent history.

Cumulative Impacts. Continuing current management would maintain the restricted accessibility and interpretive capability of the memorial, thus providing minimal aid to preserve structures associated with the Vicksburg Campaign and interpret them for the public. Cumulative impacts would be long-term, direct, moderate, and adverse.

Conclusion. Continued visual isolation and poor accessibility to the Georgia State Memorial would result in impacts to visitor use and experience that were long-term, direct, moderate to major, and adverse. Cumulative impacts would be long-term, direct, moderate, and adverse.

ALTERNATIVE B (Relocate the Georgia State Memorial) (Preferred Alternative):

Analysis. Visitor services and enjoyment would be enhanced under this alternative. By using the Georgia State Memorial as a vital part of the interpretive program, the Campaign and Siege of Vicksburg, the Union occupation, and Reconstruction could be understood in a much broader historical context. The visitor experience would be expanded and enhanced. Relocation of the memorial would also better enable the park to meet its goals under the Government Performance and Results Act.

Cumulative Impacts. Relocation of the Georgia State Memorial and providing better public access would contribute to ongoing efforts locally and regionally to preserve and interpret historic structures associated with the Vicksburg campaign, including, for example, the recent opening of the Pemberton Headquarters building in downtown Vicksburg. Relocation of the Georgia State Memorial would result in cumulative impacts to visitor use and experience would be long-term, direct, moderate, and beneficial.

Conclusion. By allowing better public access to the Georgia State Memorial, as well as making possible associated interpretive programs, relocation of the Georgia State Memorial would result in impacts to visitor use and experience that were long-term, direct, moderate to major, and beneficial. Cumulative impacts would be long-term, direct, minor, and beneficial.

ALTERNATIVE C (Construct Maintained, Accessible Footpath to Georgia State Memorial in its Current Location):

Analysis. Impacts to visitor use and experience under Alternative C would be very similar to those under Alternative B, by allowing better accessibility to the memorial in its current location.

Cumulative Impacts. Same as Alternative B.

Conclusion. As with Alternative B, relocation of the Georgia State Memorial would result in impacts to visitor use and experience that were long-term, direct, moderate to major, and beneficial. Cumulative impacts would be long-term, direct, minor, and beneficial.

3.6.3 PUBLIC HEALTH AND SAFETY

3.6.3.1 Affected Environment

Vicksburg National Military Park is responsible for maintaining safe conditions for the protection of the health and safety of both its employees and the public. This not only applies to providing safe facilities, utilities, and grounds within the park, but also includes National Park Service program and project operations. Despite the park's proximity to an urban area, visitors are exposed to several hazards associated with the locality, including heat, mosquitoes, irritating plants, encounters with feral animals, and occasional snakebite.

The current location of the Georgia State Memorial is such that it does not lend itself to the safest access or regular visitation by the public. As a result, the structure remains visually isolated.

3.6.3.2 Environmental Consequences

ALTERNATIVE A (No Action/Continue Current Management)

Analysis. Under this alternative, the National Park Service would maintain the current access to the Georgia State Memorial. Regular landscape maintenance (mowing) to provide for the safety of the public and park staff would be minimally sufficient to protect public health and safety.

Cumulative Impacts. Continuing current management would mean reliance on past maintenance measures to protect public health and safety. Scarce resources would continue to be focused on protecting public health and safety in this area, rather than focusing on other areas where these resources may be needed. Cumulative impacts would be long-term, direct, minor, and adverse.

Conclusion. Continuing current management would protect public health and safety, but would do so by relying on short-term measures rather than permanent rehabilitation. Impacts to public health and safety would be long-term, direct, minor, and adverse.

ALTERNATIVE B (Relocate the Georgia State Memorial) (Preferred Alternative):

Analysis. Relocation of the Georgia State Memorial under Alternative B would include moving the memorial 300 ft closer to the VNMP tour route. This modification also would provide for a safe means of visitor access, and would help ensure the health, comfort, safety, and security of visitors and park staff, as well as complying with applicable safety codes. Relocation would allow recurring preservation work to be performed in a safe environment, meeting all Life Safety Codes.

Cumulative Impacts. Relocation of the Georgia State Memorial would reduce risk to public health and safety by making the memorial more accessible. Cumulative impacts would be long-term, direct, minor to moderate, and beneficial.

Conclusion. Relocation of the Georgia State Memorial would allow the structure to be more readily visible and accessible for public use while at the same time enhancing the health and safety of the public and park staff. Impacts to public health and safety would be long-term, direct, minor to moderate, and beneficial.

ALTERNATIVE C (Construct Maintained, Accessible Footpath to Georgia State Memorial in its Current Location):

Analysis. The impacts of Alternative C on public health and safety would be substantially the same as those of Alternative B, allowing better accessibility to the memorial in its current location.

Cumulative Impacts. Same as Alternative B.

Conclusion. As with Alternative B, relocation of the Georgia State Memorial under Alternative C would allow the structure to be readily accessed by the public while at the same time enhancing the health and safety of the public and park staff. Impacts to public health and safety would be long-term, direct, minor to moderate, and beneficial.

3.6.3.4 PARK OPERATIONS

3.6.3.4.1 Affected Environment

The superintendent at Vicksburg National Military Park is responsible for managing the park, its staff, concessionaires, all of its programs, and its relations with persons, agencies, and organizations interested in the park. Park staff provides the full scope of functions and activities to accomplish the park's objectives, including interpretation and education, resource protection, law enforcement, emergency services, public health and safety, and fee collection.

Maintenance staff at the park consists of one full-time and one part-time employee assigned to maintain the 40-acre national cemetery. These staff members are assisted by 4 seasonal/Centennial employees during summer months in the cemetery. There are 14 full-time maintenance employees tasked with the maintenance of the rest of the park. Typically the park will staff around 4-6 summer/Centennial employees, some of which are carried over into the winter season as budget allows.

The facilities and maintenance staff are responsible for maintaining the historic structures of the park, performing grounds-keeping and keeping park facilities in working order. The existing deteriorated condition of the Shirley House requires ongoing attention.

3.6.4.2 Environmental Consequences

ALTERNATIVE A (No Action/Continue Current Management)

Analysis. Under the No Action Alternative, the maintenance and repair workload would continually increase to keep the structure from significant deterioration. This would result in long-term, moderate, adverse effects on park operations where the escalating deterioration would divert staff from other necessary park functions, and could be noticeable by the public.

Cumulative Impacts. Many projects planned for the park would contribute to cumulative effects on park operations. These projects have the potential to increase or decrease demands made on park staff to ensure effective management of park resources and visitor experiences. The No Action Alternative would detract slightly from the cumulative beneficial effects of these projects on park operations.

Conclusion. Ongoing maintenance of the Georgia State Memorial and surrounding landscape would create long-term, direct, adverse effects on park operations of moderate intensity diverting staff from other necessary park functions.

ALTERNATIVE B (Relocation of the Georgia State Memorial) (Preferred Alternative):

Analysis. Under any of the action alternatives, relocation of the Georgia State Memorial would produce long-term, minor benefits on park operations. These benefits would result from a reduction in park maintenance and repair needs based on the following:

Long-term maintenance needs would decrease, and longer intervals could be scheduled between cyclic operations. Reactive repair could be replaced with regularly scheduled maintenance activities.

Staff requirements to monitor hazards and safety issues could be reduced.

Short-term adverse effects of negligible to minor intensity would be generated by the need to manage the contractor and project, and some staff time would be required in implementation of the project. These increased burdens would end when project construction ended.

The park's operational efficiency and sustainability would be improved by using sustainable building materials, and long-term maintenance efforts would be reduced by enhancing the long-term stability of the structure. Relocation closer to the VNMP tour route would improve the visual accessibility of the monument and help prevent vandalism and structural damage from natural causes (i.e., tree blow downs), reducing the amount of park staff time needed to maintain the structure.

Cumulative Impacts. Cumulative effects from other projects would be similar to those described for Alternative A. Either of the action alternatives would slightly enhance the cumulative beneficial effects of other projects on park operations.

Conclusion. Under either action alternative, park operations would experience long-term, direct, minor benefits as the need for maintenance and the repair burden was reduced. Emergency repair activities would be replaced by lower-intensity regular maintenance, and staff could focus their attention on other resource and park management matters.

ALTERNATIVE C (Construct Maintained, Accessible Footpath to Georgia State Memorial in its Current Location):

Analysis. The impacts of Alternative C on park operations and management would be substantially the same as those of Alternative B. In addition, the installation of a maintained footpath under this alternative would add another element to the park's infrastructure that would need to be maintained and possibly replaced over time.

Cumulative Impacts. Same as Alternative B.

Conclusion. Under either action alternative, park operations would experience long-term, direct, minor benefits as the need for maintenance (i.e., erosion control) reduced. Emergency repair activities would be replaced by lower-intensity regular maintenance, and staff could focus their attention on other resource and park management matters.

3.6.5 SUSTAINABILITY AND LONG-TERM MANAGEMENT

Consideration of long-term impacts and the effects of foreclosing future options are addressed in this section. The intent of this analysis is to identify sustainable development that meets the needs of the present without compromising the ability of future generations to meet their needs. Included in the analysis is an assessment of the energy requirements of the project and the potential for energy conservation.

Unavoidable Adverse Impacts

The intent of this determination is to identify whether the proposed action or alternatives would result in impacts that could not be fully mitigated or avoided. In the present case, the installation of a maintained footpath would have minor to moderate adverse impacts on the cultural landscape, but these impacts are outweighed by the benefits of improving access to the structure.

Relationship of Short-Term Uses and Long-Term Productivity

The intent of this determination is to identify whether the proposed action or alternatives would result in trading the immediate use of the land for any long-term management possibilities or the productivity of park resources that would affect future generations. It is intended to determine whether the proposed action or alternatives would be sustainable actions that could continue over the long-term without environmental problems. Under either of the action alternatives, the park's operational efficiency and sustainability would be improved by using sustainable building materials, and long-term maintenance efforts would be reduced because of the use of new materials (where necessary and appropriate). In addition, the preferred alternative does not call for installation of a maintained footpath. The absence of such a system would prevent increased energy usage and fuel costs.

Irreversible or Irretrievable Commitments of Resources

The intent of this evaluation is to identify whether the proposed action or alternative would result in effects that could not be changed over the long term or would be permanent. An effect on a resource would be irreversible if the resource could not be reclaimed, restored, or otherwise returned to its condition before the disturbance. An irretrievable commitment of resources involves the effects on resources that, once gone, cannot be replaced or recovered. In the present instance, the intent of the project is to improve access to the Georgia State Memorial. Neither of the action alternatives would result in irreversible or permanent impacts or cause a permanent commitment of resources.

4.0 CONSULTATION AND COORDINATION

Scoping is the effort to involve agencies and the general public in determining the issues to be addressed in the environmental document. Among other tasks, scoping determines important issues and eliminates issues not important; allocates assignments among the interdisciplinary team members and other participating agencies; identifies related projects and associated documents; identifies other permits, surveys, or consultations required by other agencies; and creates a schedule which allows adequate time to prepare and distribute the environmental document for public review and comment before a final decision is made. Scoping includes early input from any interested agency or any agency with jurisdiction by law or expertise. At a minimum for National Park Service projects, agency scoping includes input from the Advisory Council on Historic Preservation, the State Historic Preservation Officer, and the U.S. Fish and Wildlife Service.

The Mississippi State Historic Preservation Office has been involved in this project from its inception. On June 23, 2011 letters were sent to the SHPO and to the Advisory Council on Historic Preservation inviting their participation in this project (see Appendix A). As part of the Section 106 process, the park also will draft an assessment of effect form, which will be forwarded to the SHPO along with this environmental assessment. Comments received from the SHPO will be reflected in the final compliance documents.

The U.S. Fish and Wildlife Service was contacted by letter regarding this project on June 23, 2011. Comments received from the U.S. Fish and Wildlife Service will be reflected in the final compliance documents. The original letter sent by the National Park Service to the U.S. Fish and Wildlife Service can be found in Appendix A.

PLANNING TEAM PARTICIPANTS

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APPENDIX A

Correspondence with Government Agencies



United States Department of the Interior

National Park Service
Vicksburg National Military Park
3201 Clay Street
Vicksburg, Mississippi, 38183



June 23, 2011

Memorandum

To: Steve Ricks, Field Supervisor, Mississippi Field Office, U.S. Fish & Wildlife Service

From: Superintendent, Vicksburg National Military Park

Subject: Environmental Assessment, Improving Access to the Georgia State Memorial

The National Park Service (NPS) has prepared an Environmental Assessment to address improving visitor accessibility to the Georgia State Memorial at Vicksburg National Military Park in Vicksburg, Mississippi. The memorial is included in the National Register of Historic Places which encompasses all of Vicksburg National Military Park, and is on the park's List of Classified Structures (#3364).

Originally situated directly on the park tour road, the memorial now stands approximately 300 feet away on the roadbed removed in the mid-1960s when the park tour road was converted to a 'closed loop.' Currently, visitors traveling the park tour road have their attention focused predominantly on the Ft. Garrott earthwork at Tour Stop 14, and the visual presence of the Georgia State Memorial is often missed. Additionally, access to the memorial is currently along the grassed former roadbed raising issues concerning accessibility and visitor safety.

These concerns have been addressed in this environmental assessment (EA), and 3 alternatives are considered.

Alternative A, the No Action Alternative: The memorial will remain in its current location and routine maintenance (mowing) would continue.

Alternative B (Preferred Alternative): The memorial would be moved approximately 300 ft closer to the park tour road.

Alternative C: The memorial would remain in its current position and an approximately 300-ft, maintained footpath would be created, leading from the tour road to and around the memorial.

This environmental assessment has evaluated the effects of these alternatives on natural and cultural resources, as well as on visitor experience and the human environment. Among other benefits, the improved access to the Georgia State Memorial would better the condition of an important park resource and greatly enhance the visitor experience. The alternatives analyzed in this environmental assessment would not result in major environmental impacts or impairment to park resources or values.

In accordance with NEPA requirements, we are eliciting your comments and invite you to review the environmental assessment document. We also request a current list of federally listed threatened or endangered species, species of concern, or any other special status species that might occur in the locality mentioned above, and designated critical habitats, if any, for these species.

We appreciate your time and interest in our EA and would appreciate receiving any comments that you might wish to offer so that we may incorporate them into our final decision and documentation. The EA is on public review ending on July 20, 2011.

This memorandum will serve as a record that the NPS is initiating formal consultation with your agency pursuant to the requirements of the 1973 Endangered Species Act, as amended, and 2001 NPS Management Policies.

If you have questions or concerns, or need additional information, please contact me by July 13, 2011. We would also be happy to arrange a meeting with you at your convenience to discuss this project. Please contact our Natural Resources Specialist, Virginia DuBow, at 601-619-2911 or a Virginia_dubow@nps.gov if you have questions or would like to schedule a meeting.

We look forward to receiving your input on this project.

Attachment



United States Department of the Interior

National Park Service
Vicksburg National Military Park
3201 Clay Street
Vicksburg, Mississippi, 38183



June 23, 2011

Mr. Greg Williamson
Review and Compliance Officer
Department of Archives and History
P.O. Box 571
Jackson, MS 39205-0571

Dear Mr. Williamson:

The National Park Service (NPS) has prepared an Environmental Assessment to address improving visitor accessibility to the Georgia State Memorial at Vicksburg National Military Park in Vicksburg, Mississippi. The memorial is included in the National Register of Historic Places which encompasses all of Vicksburg National Military Park, and is on the park's List of Classified Structures (#3364).

Originally situated directly on the park tour road, the memorial now stands approximately 300 feet away on the roadbed removed in the mid-1960s when the park tour road was converted to a 'closed loop.' Currently, visitors traveling the park tour road have their attention focused predominantly on the Ft. Garrott earthwork at Tour Stop 14, and the visual presence of the Georgia State Memorial is often missed. Additionally, access to the memorial is currently along the grassed former roadbed raising issues concerning accessibility and visitor safety.

These concerns have been addressed in this environmental assessment (EA), and 3 alternatives are considered.

Alternative A, the No Action Alternative: The memorial will remain in its current location and routine maintenance (mowing) would continue.

Alternative B (Preferred Alternative): The memorial would be moved approximately 300 ft closer to the park tour road.

Alternative C: The memorial would remain in its current position and an approximately 300-ft, maintained footpath would be created, leading from the tour road to and around the memorial.

This environmental assessment has evaluated the effects of these alternatives on natural and cultural resources, as well as on visitor experience and the human environment. Among other benefits, the improved access to the Georgia State Memorial would better the condition of an important park resource and greatly enhance the visitor experience. The alternatives analyzed in this environmental assessment would not result in major environmental impacts or impairment to park resources or values.

In accordance with NHPA requirements, we are eliciting your comments and invite you to review the environmental assessment document. We initially contacted MDAH about this project by letter in November 1990. In a response dated March 13, 1991, your office concurred on a plan for improving access to the Georgia State Memorial submitted by the park. Based on the information in your response, as well as information in park files, the National Park Service believes none of the currently proposed alternative actions is likely to have an adverse affect on any archeological or historical resources listed or eligible for listing in the National Register of Historic Places.

We appreciate your time and interest in our EA and would appreciate receiving any comments that you might wish to offer so that we may incorporate them into our final decision and documentation. The EA is on public review ending on July 20, 2011.

This memorandum will serve as a record that the NPS is initiating formal consultation with your agency pursuant to the requirements of the Sections 106 and 110 of the National Historic Preservation Act and 2006 NPS Management Policies.

If you have questions or concerns, or need additional information, please contact me by July 13, 2011. We would also be happy to arrange a meeting with you at your convenience to discuss this project. Please contact our Natural Resources Specialist, Virginia DuBow, at 601-619-2911 or a Virginia_dubow@nps.gov if you have questions or would like to schedule a meeting.

We look forward to receiving your input on this project.

Sincerely,

R. Michael Madell
Superintendent

Encl.



United States Department of the Interior



National Park Service
Vicksburg National Military Park
3201 Clay Street
Vicksburg, Mississippi, 38183

June 23, 2011

Ms. Caroline D. Hall
Assistant Director
Federal Property Management Section
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue NW, Suite 803
Washington, D.C. 20004

Dear Ms. Hall:

The National Park Service (NPS) has prepared an Environmental Assessment to address improving visitor accessibility to the Georgia State Memorial at Vicksburg National Military Park in Vicksburg, Mississippi. The memorial is included in the National Register of Historic Places which encompasses all of Vicksburg National Military Park, and is on the park's List of Classified Structures (#3364).

Originally situated directly on the park tour road, the memorial now stands approximately 300 feet away on the roadbed removed in the mid-1960s when the park tour road was converted to a 'closed loop.' Currently, visitors traveling the park tour road have their attention focused predominantly on the Ft. Garrott earthwork at Tour Stop 14, and the visual presence of the Georgia State Memorial is often missed. Additionally, access to the memorial is currently along the grassed former roadbed raising issues concerning accessibility and visitor safety.

These concerns have been addressed in this environmental assessment (EA), and 3 alternatives are considered.

Alternative A, the No Action Alternative: The memorial will remain in its current location and routine maintenance (mowing) would continue.

Alternative B (Preferred Alternative): The memorial would be moved approximately 300 ft closer to the park tour road.

Alternative C: The memorial would remain in its current position and an approximately 300-ft, maintained footpath would be created, leading from the tour road to and around the memorial.

This environmental assessment has evaluated the effects of these alternatives on natural and cultural resources, as well as on visitor experience and the human environment. Among other benefits, the improved access to the Georgia State Memorial would better the condition of an important park resource and greatly enhance the visitor experience. The alternatives analyzed in this environmental assessment would not result in major environmental impacts or impairment to park resources or values.

In accordance with NHPA requirements, we are eliciting your comments and invite you to review the environmental assessment document. Past consultation with the SHPO (1991), resulted in concurrence on a plan for improving access to the Georgia State Memorial submitted by the park. Follow-up Section 106 consultation has been initiated through a memorandum to the SHPO dated June 23, 2011, describing the project and inviting continuing agency participation. The National Park Service believes none of the currently proposed alternative actions is likely to have an adverse affect on any archeological or historical resources listed or eligible for listing in the National Register of Historic Places.

We appreciate your time and interest in our EA and would appreciate receiving any comments that you might wish to offer so that we may incorporate them into our final decision and documentation. The EA is on public review ending on July 20, 2011.

This memorandum will serve as a record that the NPS is initiating formal consultation with your agency pursuant to the requirements of the Sections 106 and 110 of the National Historic Preservation Act, Section 800.8(c) of ACHP regulations, and 2006 NPS Management Policies.

If you have questions or concerns, or need additional information, please contact me by July 13, 2011. We would also be happy to arrange a meeting with you at your convenience to discuss this project. Please contact our Natural Resources Specialist, Virginia DuBow, at 601-619-2911 or a Virginia_dubow@nps.gov if you have questions or would like to schedule a meeting.

We look forward to receiving your input on this project.

Sincerely,

R. Michael Madell
Superintendent

Encl.